



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

AW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,527	02/28/2002	Rong-Chang Liang	26822-0002C1	3462
25213	7590	05/21/2004	EXAMINER	
HELLER EHRMAN WHITE & MCAULIFFE LLP			TRA, TUYEN Q	
275 MIDDLEFIELD ROAD			ART UNIT	
MENLO PARK, CA 94025-3506			PAPER NUMBER	

2873

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,527

Applicant(s)

LIANG ET AL.

Examiner

Tuyen Q Tra

Art Unit

2873

A

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 12-22, 32-49, 51 and 54-57 is/are allowed.
- 6) ☒ Claim(s) 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0903.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 23-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 67 of previous Application No. 09/784,972.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose the process comprising of steps for imagewise exposure through a photomask which is moving at the same speed as a web substrate, step for coating a layer of a radiation curable material on the support web. However, claim 67 of application serial number 09/784,972 do not implicitly disclose the web substrate comprises an ITO conductor layer on a plastic substrate and ITO. Since claim 67 teaches support web which, in the other hand, is including a patterned conductor film, such as addressable indium-tin oxide (ITO) lines as disclosed in summary of the '972' specification. Therefore, it would have been obvious to one ordinary skill in the art at the time invention was made to use support web of '972' in place of web substrate and ITO conductor layer coated for manufacturing process.

Art Unit: 2873

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunn et al. (U.S. Pat. 6,018,383A).

a) With respect to claim 23, Dunn et al. discloses a process for patterning structures on electronic modules in Figure 1 comprising a support web (flexible material substrate (item 34)), in col. 6, lines 1-20, and lines 56-67, and in col. 7, lines 1-11, discloses the mask is rolled such that a portion of the mask and a portion of the substrate are substantially parallel, and rolling in the same velocity (a common drive motor assembly for the mask and the substrate) and in the same direction (see Figures 1, and 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2873

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,018,383 (Dunn et al) in view of U. S. Patent Application Publication No. 2002/0029969 (Yager et al).

Dunn et al. discloses a manufacture process comprising steps for imagewise exposure through a photomask which is moving as the same speed as web substrate. However, Dunn et al. does not disclose ITO conductor layer wherein the conductor layer is coated with radiation sensitive material.

Within the same field of endeavor, Yager, in the abstract, in [0013], in [0025], [0026], [0027], in [0029], and in [0039], [0040] and in figures 1B, and 2B, discloses that the support web (movable separation matrix on a solid support) comprises a plurality of conductor lines (wires), and that the radiation sensitive composition is radiation curable material such as positive photoresists are coated over the conductor lines, and the structures are disposed as an array of microcups (reference 2, with microcup walls) with a top opening for a display device.

It would have been obvious, therefore, at the time the invention was made to a person having skill in the art to construct a steps for imagewise exposure photomask which moves as the same speed as web substrate such as disclosed by Dunn et al., with ITO conductor layer wherein the conductor layer is coated with radiation sensitive material such as discloses by Yager, for purpose of forming electrodes and microcup wall in display device.

Allowable Subject Matter

7. Claims 1-10, 12-22, 32-49, 51 and 54-57 are allowed.

Art Unit: 2873

The reason for the indication of allowable subject matter is that (claims 1 and 8) a polymeric sealing layer which is formed from a sealing composition having a specific gravity lower than that of the electrophoretic composition and sealingly adheres to the surface of the partition walls to enclose the electrophoretic composition within the cell disclosed in the claims is not found in the prior art.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Tra whose telephone number is (571) 272-2343. The examiner can normally be reached on Monday to Thursday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps, can be reached on (571) 272 - 2328. The fax number for this Group is (703) 872-9306.

tt

May 5, 2004


Hung Xuan Dang
Primary Examiner